REMARKS

Claims 1-27 and 30-31 were in issue. By this amendment, claims 1-3, 5, 21-23, and 25 have been canceled, and claims 4, 6, 7, 24, 26, and 27 have been amended. Accordingly, claims 4, 6-20, 24, 26-27, and 30-31 are presented and at issue. No new matter has been added. By this amendment, the remaining claims are believed to be in condition for allowance.

Applicants appreciate the Examiner's indication of allowable subject matter for claim 30, and withdrawal of the previous rejections based upon Schwartz and Cochran.

The Invention

The invention comprises a computer file control system, with a suitable user interface, which allows a user to define category descriptions for files stored in a computer system. A user can edit such category descriptions as they are used, designate all applicable category descriptions for each file, and link category descriptions in user-definable ways. The invention further allows a user to be reminded of linked category descriptions. Category descriptions are descriptive names defined by a user. Category descriptions must be defined before associating them with a file, meaning that they are "pre-defined" or "pre-existing".

In the process of search and retrieval, the invention overcomes the problem of search filter definition by insuring that the user defines a filter which will always find at least one file, thus avoiding wasting time in searching for data that cannot be matched. This is achieved in 3 ways:

1: The user is not required to type the key words to search. Instead, the user simply chooses the words from pick lists by using positional input (e.g. with a mouse), making mistyping impossible.

2: The keywords presented are only those predefined in the system and associated with at least one file.

3: As the user builds the search filter definition, categories which find no data are automatically excluded as pick list possibilities.

-6-

Claims 4 and 24, and the claims dependent thereof, have been amended to recite language that defines these three characteristics. More particularly, claim 4 has been amended as follows:

(a) <u>initially</u> defining in the computer system at least one list having a plurality of category descriptions, each category description comprising a descriptive name, the category descriptions having no predefined hierarchical relationship with such list or each other;

(b) <u>thereafter</u> accepting user input associating with a file at least one category description from at least one defined list;

(c) storing in the data storage system a file record containing at least the file name, file location information, and the associated category descriptions for the file;

(d) displaying <u>from</u> each defined list <u>only those category descriptions associated with at least one file</u>;

(e) accepting user <u>positional</u> input defining a search filter of at least one category description selected from at least one displayed defined list;

(f) <u>automatically disabling in the computer system selectability of all other category descriptions in each displayed list that do not have associated files which are also associated with the category descriptions of the defined search filter;</u>

(g) searching in the computer system the category descriptions of each stored file record for a logical match to the category descriptions of the defined search filter;

(h) [(g)] displaying the file names of all file records having category descriptions that logically match each category description of the defined search filter.

Importantly, the invention constrains a user to first define category descriptions, and then associate one or more defined category descriptions with a file. This constraint ensures that the system always "knows" the set of possible descriptors before a file is linked to them. This constraint also means that the retrieval system always "knows" the set of possible descriptors before a search filter can be defined. Therefore, a search filter can never be defined to contain descriptors that do not already exist in the indexing system. Thus, referring to claim 7, for each category description in a search filter, there is <u>guaranteed</u> to be at least one entry in the file information directory having a set of category descriptions matching the set of category descriptions of the search filter.

Section 102 Rejection

The Examiner rejected claims 27 under §102 as being anticipated by the reference to the "Thought Pattern Handbook" (hereafter, the "TPH reference"). Applicants respectfully traverse this rejection with respect to the claims as amended.

Claim 27 requires "category linking means". the Examiner asserts that the TPH reference teaches such a means at p. 4, para. 4. That paragraph refers to "Tab Groups", which simply allow a subset of tabs to be grouped together. Tab Groups function much like file directories on a PC. Other than permitting collecting subsets of tabs together, the Tab Groups of the TPH reference do not function at all like the category linking means of the present invention. As defined in claim 27, when a category description (e.g., "Mail") is linked, as the "linking category description", to at least one "linked category description" (e.g., "Sent", "Received", "Action", "Urgent", "Reply", "Forward"), the assignment of a specific file to the linking category description triggers a <u>requirement</u> that the user <u>must</u> assign one of the linked category descriptions to that file. This insures one of the purposes of the invention, which is to reduce typing mistakes and insure that a search for a file defined by selecting category descriptions must result in finding the file. Accordingly, the TPH reference fails to anticipate all of the elements of claim 27.

Section 103 Rejection

The Examiner's rejections under §103 of the claims canceled herewith are moot. Amended claims 4 and 24 combine prior claims 5 and 25. The Examiner rejected claims 5 and 25 in view of the triple combination of the TPH reference, Schwartz, and Cochran. Applicants respectfully traverse this rejection.

The Examiner argued that Cochran teaches "disabling ... selection of all category ..." and that it would be obvious to combine Cochran with the TPH reference and Schwartz "because eliminating categories that if added to the search filter would result in no files being returned would save time..."

This is the <u>SECOND</u> time the Examiner has asserted that Cochran teaches such disabling, citing to col. 10, lines 49-53 of Cochran for support. (In the Office Action dated 1/26/94, the Examiner

asserted that Cochran teaches or suggests "disabling ... selectability of all category descriptions in each displayed list that would not provide a logical match to the category descriptions of the defined search filter".) HOWEVER, contrary to the assertion by the Examiner, Cochran DOES NOT teach or suggest this where indicated, and Applicants have not found an alternative citation supporting the Examiner's assertion. Col. 10, lines 49-53 of Cochran have <u>nothing</u> to do with disabling selectability of category descriptions in displayed lists. This specific reference refers only to the creation of dynamic lists by actively searching specific fields in a database to determine all unique terms that actually appear in that field.

Further, the asserted combination of 3 references fails to teach or suggest each and every step of claims 4 and 24 as amended. Specifically, these references fail to teach or suggest the following combination of elements:

Claim Limitation	Comment
<u>initially</u> defining ... at least one list having a plurality of category description... ;	Requiring such initial definition means that a pre-existing description exists for any file item to be indexed. None of the references teach or suggest this. The TPH reference specifically teaches that items can be added without adding tabs (p. 21, 4th para.)
<u>thereafter</u> accepting user input associating with a file at least one category description...;	The event sequence recited means that a user cannot "forget" to assign category descriptions to files.
storing in the data storage system a file record...;	
displaying from each defined list <u>as selectable items only</u> those category descriptions associated with at least one file;	By displaying only those category descriptions that are selectable (i.e., by graying out or suppression), a user is presented immediately with only those category descriptions that will result in a match. None of the references teach or suggest this.

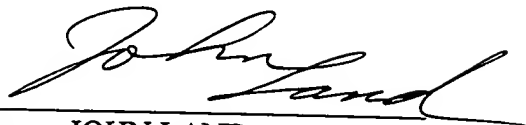|	
accepting user positional input defining a search filter ...;	
<u>automatically</u> disabling in the computer system selectability of all other category descriptions in each displayed list that do not have associated files which are also associated with the category descriptions of the defined search filter;	In the TPH reference, selecting multiple tabs <u>broadens</u> the number of retrievable items, since any item that is under ANY of the tabs is indicated as retrievable. In the present invention, selecting multiple category descriptions <u>narrows</u> the number of retrievable items, thus making the category descriptions ideal means for rapidly finding a number of items in a large collection of possibilities.
searching in the computer system ...;	
displaying the file names of all file records having category descriptions that logically match each category description of the defined search filter.	

The claims dependent from claims 4 and 24 add additional limitations, many not shown by the combination by the Examiner of 3, 4, and even 5 references. Applicants submit that the Examiner has simply pasted together enough disparate elements to show, in hindsight, that some of Applicants' claim limitations are suggested or taught in the prior art.

Accordingly, Applicants submit that none of the references, alone or in combination, anticipate or make obvious the invention as presently claimed. Applicants submit that this case is now in condition for allowance, and therefore respectfully request reconsideration and reexamination of the present application, and allowance of the case at an early date.

Respectfully submitted,

FISH & RICHARDSON

Dated: August 7, 1995

By: JOHN LAND
Reg. No. 29,554

4225 Executive Square
Suite 1400
La Jolla, CA 92037
(619) 678-5070